AMENDMENTS TO THE CLAIMS

The following is a complete, marked-up listing of revised claims with a status identifier in parenthesis, underlined text indicating insertions, and strike through and/or double-bracketed text indicating deletions.

LISTING OF CLAIMS

1. (Currently Amended) A method for producing CT images of a partially cyclically moving examination object, comprising:

scanning the examination object in one pass by a spiral movement of at least one focus and at least one detector oppositely situated;

performing the scanning of the examination region at a relative feed rate between gantry and couch;

determining a three-dimensional image of absorption coefficients with the aid of a multiplicity of sectional planes of an examination volume on the basis of the data obtained by scanning;

determining at least one static object area and at least one at least partially moving object area with reference to the examination object with the aid of cyclical intrinsic movement, with the determining performed during the scanning; and

using, during a pass when scanning the examination object, a relatively low feed rate upon the determining of the at least one at least partially moving object area, and using a relatively higher feed rate upon the determining of the at least one static object area ~~a first feed rate in the at least one moving object area, and using another, second feed rate in the at least one static object area~~.

2. (Cancelled)

3. (Currently Amended) The method as claimed in claim 2, wherein [[the]]a position of [[the]]a beating heart is determined in order to divide the examination object into the static and moving object areas.

4. (Cancelled)

5. (Currently Amended) The method as claimed in claim [[3]]20, wherein the determination of static and moving object areas before the scan is performed ~~by at least one optical recording, preferably~~ with subsequent manual subdivision of the areas.

6. (Previously Presented) The method as claimed in claim 1, wherein the transition between the feed rates is performed with a prescribed maximum acceleration.

7. (Cancelled)

8. (Currently Amended) The method as claimed in claim 1, wherein the detection of the cyclical movement of the subarea of the examination object is performed in the current scanning area by comparing an~~virtue of the fact that the~~ intensity measurement of at least one pair of time-offset rays on a common ray axis ~~is compared to two consecutive instants~~.

9. (Previously Presented) The method as claimed in claim 1, wherein during scanning at a

relatively low feed rate, the movement of the heart is temporally resolved by way of ECG leads and is divided into movement phases and rest phases, with only detected data from the rest phase being used to compile images.

10. (Currently Amended) The method as claimed in claim 1, wherein ~~use is made when~~the scanning ~~the moving area of a CT spiral reconstruction method that~~ uses only detector data from a specific cycle rest phase of the cyclically moving area and~~, whereas during scanning of the static area use is made of a spiral reconstruction method that~~ uses all the measured detector data of the static area ~~for the reconstruction~~.

11. (Currently Amended) The method as claimed in claim 1, wherein [[the]]an intensity of radiation emanating from the at least one focus is matched to ~~the respectively~~ a current feed rate.

12. (Previously Presented) The method as claimed in claim 11, wherein the intensity of radiation is matched by at least one of controlling and regulating a tube current.

13. (Currently Amended) A CT unit for scanning an at least partially cyclically moving examination object, comprising:

at least one focus from which a beam is ~~eminated~~ emanated;[[and]]

at least one detector of planar design, including a multiplicity of distributed detector elements for detecting the rays of the beam, the at least one focus being movable relative to the examination object with a feed rate on a spiral focal track revolving about the examination object;[[and]]

means for determining a three-dimensional image of absorption coefficients with the aid of a multiplicity of sectional planes of an examination volume on the basis of the data obtained by scanning[[,]];

means for determining at least one static object area and at least one at least partially moving object area with reference to the examination object with the aid of cyclical intrinsic movement, with the determining performed during the scanning; and

means for using, during a pass when scanning the examination object, a relatively low feed rate upon the determining of the at least one at least partially moving object area, and using a relatively higher feed rate upon the determining of the at least one static object area ~~a first feed rate in the at least one moving object area, and using another, second feed rate in the at least one static object area~~.

14. (Previously Presented) The CT unit as claimed in claim 13, wherein said means are implemented at least partially by at least one of programs and program modules.

15. (Previously Presented) The CT unit as claimed in claim 13, wherein an apparatus is provided for controlling the feed rate as a function of scanning area.

16. (Currently Amended) The ~~method as claimed in claim 3~~CT unit as claimed in claim 22, wherein the determination of static and moving object areas before the scan is performed ~~by at least one optical recording,~~ with subsequent manual subdivision of the areas.

17. (Cancelled)

18. (Currently Amended) The ~~method as claimed in claim 1~~CT unit as claimed in claim 13, wherein the detection of the cyclical movement of the subarea of the examination object is performed in the current scanning area ~~by virtue of the fact that the~~by comparing an intensity measurement of two oppositely directed rays ~~is compared to~~at two ~~consecutive~~time instants.

19. (Previously Presented) The CT unit as claimed in claim 14, wherein an apparatus is provided for controlling the feed rate as a function of scanning area.

20. (New) A method for producing CT images of a partially cyclically moving examination object, comprising:

scanning the examination object in one pass by a spiral movement of at least one focus and at least one detector oppositely situated;

performing the scanning of the examination region at a relative feed rate between gantry and couch;

determining a three-dimensional image of absorption coefficients with the aid of a multiplicity of sectional planes of an examination volume on the basis of the data obtained by scanning;

determining at least one static object area and at least one at least partially moving object area with reference to the examination object with the aid of cyclical intrinsic movement, with the determining performed before the scanning by at least one topogram recording; and

using, during a pass when scanning the examination object, a first feed rate in the at least one moving object area and using a second feed rate in the at least one static object area.

21. (New) The method as claimed in claim 20, wherein the detection of the cyclical movement of the subarea of the examination object is performed in the current scanning area by comparing an

intensity measurement of at least one pair of time-offset rays on a common ray axis.

22. (New) A CT unit for scanning an at least partially cyclically moving examination object, comprising:

at least one focus from which a beam is emanated;

at least one detector of planar design, including a multiplicity of distributed detector elements for detecting the rays of the beam, the at least one focus being movable relative to the examination object with a feed rate on a spiral focal track revolving about the examination object;

means for determining a three-dimensional image of absorption coefficients with the aid of a multiplicity of sectional planes of an examination volume on the basis of the data obtained by scanning;

means for determining at least one static object area and at least one at least partially moving object area with reference to the examination object with the aid of cyclical intrinsic movement, with the determining performed before the scanning by at least one topogram recording; and

means for using, during a pass when scanning the examination object, a first feed rate in the at least one at least partially moving object area and a second feed rate in the at least one static object area.

23. (New) The CT unit as claimed in claim 22, wherein the detection of the cyclical movement of the subarea of the examination object is performed in the current scanning area by comparing an intensity measurement of two oppositely directed rays at two time instants.